



MECHANICAL DATA SHEET: VESSEL

PLANT ITEM No.

24590-LAW-LFP-VSL-00002

Project:	RPP-WTP	P&ID:	24590-LAW-M6-LFP-P0001; 24590-LAW-M6-LFP-P0002
Project No:	24590	Process Data Sheet:	Deleted 1 3/7/05
Project Site:	Hanford	Vessel Drawing	24590-LAW-MV-LFP-P0001
Description:	Melter 1 Feed Vessel		

Reference Data

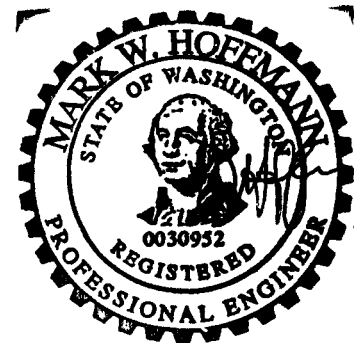
Charge Vessels (Tag Numbers)	Not Applicable
Pulsejet Mixers / Agitators (Tag Numbers)	LFP-AGT-00002
RFDs/Pumps (Tag Numbers)	LFP-PMP-00007, LFP-PMP-00008, LFP-PMP-00009, LFP-PMP-00010, LFP-PMP-00011, LFP-PMP-00012, LFP-PMP-00002
Spray Nozzles	LFP-NOZ-00003, LFP-NOZ-00004, LFP-NOZ-00005

Design Data

Quality Level	CM (Note 4)		Fabrication Specs	24590-WTP-3PS-MV00-TP001		
Seismic Category	SC-III		Design Code	ASME VIII Div 1		
Service/Contents	LAW Melter Feed		Code Stamp	Yes		
Design Specific Gravity	1.90		NB Registration	Yes		
Maximum Operating Volume	gal	7,689	Weights (lbs)	Empty	Operating	Test
Total Volume	gal	9,123	Estimated	44,500	164,600	120,800
			Actual *			

Inside Diameter	inch	132	Wind Design	Not Required		
Length/Height (TL-TL)	inch	126	Snow Design	Not Required		
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	
					24590-WTP-3PS-MV00-TP002	
					24590-WTP-3PS-FB01-T0001	
Internal Pressure	psig	0.07	15	None	Seismic Base Moment *	ft*lb
External Pressure	psig	4.09	FV	None	Postweld Heat Treat	Not Required
Temperature	°F	98	150	None	Corrosion Allowance	Inch 0.04 Top Head 0.125 Shell & Btm Head
Min. Design Metal Temp.	°F	40			Hydrostatic Test Pressure *	psig

Note: Please note that source, special nuclear and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA), are regulated at the U.S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority. DOE asserts, that pursuant to the AEA, it has sole and exclusive responsibility and authority to regulate source, special nuclear, and byproduct materials at DOE-owned nuclear facilities. Information contained herein on radionuclides is provided for process description purposes only.

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RPP-WTP PDC


EXPIRES 12/10/06

This bound document contains a total of 2 sheets.

1	Issued for Permitting Use	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	3/7/05
0	Issued for Permitting Use	J. Jackson	S. Lee	C. Slater	E. Islem	12/29/03
Rev.	Reason for Revision	By	Checked	Review	Approved	Date



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Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	SA-240 316 (Note 2)	See Drawing	Auxiliary
Shell	SA-240 316 (Note 2)	See Drawing	Primary
Bottom Head	SA-240 316 (Note 2)	See Drawing	Primary
Support	SA-240 304 (Note 2)	See Drawing	N/A
Jacket/Coils/Half-Pipe Jacket	N/A	N/A Δ_1	N/A
Internals	SA-240 316 (Note 2)	See Drawing	Thermowells Primary
Pipe (Seamless)	SA-312 TP316 Seamless (Note 2)	See Drawing	Note 3
Forgings/ Bar stock	SA-182 F316 (Note 2)	See Drawing	N/A
Gaskets (O Ring)	EPDM O-Ring	N/A	N/A
Bolting	SA-193 B8M / SA-194 8M	N/A	N/A

Miscellaneous Data

Orientation	Vertical	Support Type	Skirt
Insulation Function	Not Applicable	Insulation Material	Not Applicable
Insulation Thickness (inch)	Not Applicable	Internal Finish	Welds descaled as laid
		External Finish	Welds descaled as laid

Remarks

* To be determined by the vendor.

Note 1: Deleted.

Note 2: Material shall have Carbon Content of 0.030% Max. Non-welded items are excluded from this requirement.

Note 3: Nozzle necks below normal operating level are Primary, others Auxiliary. See 24590-WTP-3PS-MV00-TP001 for NDE Δ_1

Note 4: Additional NDE requirements should be as per 6.4 of 24590-WTP-3PS-MV00-TP001.

Note 5: Contents of this document are dangerous waste permit affecting. Δ_1